AMENDMENTS TO THE CLAIMS

1. (Original) A human monoclonal antibody that specifically binds to Tumor Necrosis Factor-α and comprises a heavy chain complementarity determining region 1 (CDR1) having an amino acid sequence of "Ser Tyr Asp Met His".

2. (Original) The human monoclonal antibody of Claim 1, comprising a heavy chain complementarity determining region 2 (CDR2) having an amino acid sequence of "Val Ile Trp Ser Asp Gly Ser Ile Lys Tyr Tyr Ala Asp Ser Val Lys Gly".

3. (Original) The human monoclonal antibody of Claim 2, comprising a heavy chain complementarity determining region 3 (CDR3) having an amino acid sequence of "Glu Val Glu Ser Ala Met Gly Gly Phe Tyr Tyr Asn Gly Met Asp Val".

4. (Original) The human monoclonal antibody of Claim 1, comprising a heavy chain amino acid comprising the amino acid sequence shown in SEQ ID NO: 70.

5. (Original) The human monoclonal antibody of Claim 1, comprising a heavy chain amino acid comprising the amino acid sequence shown in SEQ ID NO: 74.

6. (Original) The human monoclonal antibody of Claim 1, comprising a light chain complementarity determining region 1 (CDR1) having an amino acid sequence of "Arg Ala Ser Gln Gly Ile Arg Ile Asp Leu Gly".

7. (Original) The human monoclonal antibody of Claim 6, comprising a light chain complementarity determining region 2 (CDR2) having an amino acid sequence of "Ala Ala Ser Thr Leu Gln Ser".

8. (Original) The human monoclonal antibody of Claim 7, comprising a light chain complementarity determining region 3 (CDR3) having an amino acid sequence of "Leu Gln His Lys Ser Tyr Pro Leu Thr".

9. (Original) The human monoclonal antibody of Claim 6, comprising a light chain amino acid comprising the amino acid sequence shown in SEQ ID NO: 72.

10. (Original) A human monoclonal antibody that specifically binds to Tumor Necrosis Factor-α and comprises a light chain complementarity determining region 1 (CDR1) having an amino acid sequence of "Arg Ala Ser Gln Gly Ile Arg Ile Asp Leu Gly".

11. (Original) The human monoclonal antibody of Claim 10, comprising a light chain complementarity determining region 2 (CDR2) having an amino acid sequence of "Ala Ala Ser Thr Leu Gln Ser".

12. (Original) The human monoclonal antibody of Claim 11, comprising a light chain complementarity determining region 3 (CDR3) having an amino acid sequence of "Leu Gln His Lys Ser Tyr Pro Leu Thr".

13. (Original) The human monoclonal antibody of Claim 10, comprising a heavy chain complementarity determining region 1 (CDR1) having an amino acid sequence of "Ser Tyr Asp Met His".

14. (Original) The human monoclonal antibody of Claim 13, comprising a heavy chain complementarity determining region 2 (CDR2) having an amino acid sequence of "Val Ile Trp Ser Asp Gly Ser Ile Lys Tyr Tyr Ala Asp Ser Val Lys Gly".

15. (Original) The human monoclonal antibody of Claim 14, comprising a heavy chain complementarity determining region 3 (CDR3) having an amino acid sequence of "Glu Val Glu Ser Ala Met Gly Gly Phe Tyr Tyr Asn Gly Met Asp Val".

16. (Original) A human monoclonal antibody that specifically binds to Tumor Necrosis Factor-α and comprises VH3-33 heavy chain gene, or conservative variant thereof.

17. (Original) The human monoclonal antibody of Claim 16, comprising an A30VK1 light chain gene.

18. (Original) A human monoclonal antibody that specifically binds to Tumor Necrosis Factor-α, wherein antibody comprises a heavy chain complementarity determining region 1 (CDR1) corresponding to canonical class 1.

19. (Original) The human monoclonal antibody of Claim 18, wherein said antibody comprises a heavy chain complementarity determining region 2 (CDR2) corresponding to canonical class 3.

20. (Original) The human monoclonal antibody of Claim 19, wherein said antibody comprises a light chain complementarity determining region 1 (CDR1) corresponding to canonical class 2.

21. (Original) The human monoclonal antibody of Claim 20, wherein said antibody comprises a light chain complementarity determining region 2 (CDR2) corresponding to canonical class 1.

22. (Original) The human monoclonal antibody of Claim 21, wherein said antibody comprises a light chain complementarity determining region 3 (CDR3) corresponding to canonical class 1.

23. (Original) A human monoclonal antibody that specifically binds to Tumor Necrosis Factor-α and comprises a heavy chain complementarity determining region 1 (CDR1) having an amino acid sequence of "Arg Asn Tyr Met Ser".

24. (Original) The human monoclonal antibody of Claim 23, comprising a heavy chain complementarity determining region 2 (CDR2) having an amino acid sequence of "Val Ile Tyr Ser Gly Asp Arg Thr Tyr Tyr Ala Asp Ser Val Lys Gly".

25. (Original) The human monoclonal antibody of Claim 24, comprising a heavy chain complementarity determining region 3 (CDR3) having an amino acid sequence of "Gly Glu Gly Gly Phe Asp Tyr".

26. (Original) The human monoclonal antibody of Claim 23, comprising a heavy chain amino acid comprising the amino acid sequence shown in SEQ ID NO: 50.

27. (Original) The human monoclonal antibody of Claim 23, comprising a light chain complementarity determining region 1 (CDR1) having an amino acid sequence of "Arg Ala Ser Gln Ser Val Ser Ser Asn Leu Ala".

28. (Original) The human monoclonal antibody of Claim 27, comprising a light chain complementarity determining region 2 (CDR2) having an amino acid sequence of "Gly Ala Ser Ile Arg Ala Thr".

29. (Original) The human monoclonal antibody of Claim 28, comprising a light chain complementarity determining region 3 (CDR3) having an amino acid sequence of "Gln Gln Tyr Asn Tyr Trp Trp Thr".

30. (Original) The human monoclonal antibody of Claim 23, comprising a light chain amino acid comprising the amino acid sequence shown in SEQ ID NO: 52.

31. (Original) A human monoclonal antibody that specifically binds to Tumor Necrosis Factor-α and comprises a light chain complementarity determining region 1 (CDR1) having an amino acid sequence of "Arg Ala Ser Gln Ser Val Ser Ser Asn Leu Ala".

32. (Original) The human monoclonal antibody of Claim 31, comprising a light chain complementarity determining region 2 (CDR2) having an amino acid sequence of "Gly Ala Ser Ile Arg Ala Thr".

33. (Original) The human monoclonal antibody of Claim 32, comprising a light chain complementarity determining region 3 (CDR3) having an amino acid sequence of "Gln Gln Tyr Asn Tyr Trp Trp Thr".

34. (Original) The human monoclonal antibody of Claim 31, comprising a heavy chain complementarity determining region 1 (CDR1) having an amino acid sequence of "Arg Asn Tyr Met Ser".

35. (Original) The human monoclonal antibody of Claim 34, comprising a heavy chain complementarity determining region 2 (CDR2) having an amino acid sequence of "Val Ile Tyr Ser Gly Asp Arg Thr Tyr Tyr Ala Asp Ser Val Lys Gly".

36. (Original) The human monoclonal antibody of Claim 35, comprising a heavy chain complementarity determining region 3 (CDR3) having an amino acid sequence of "Gly Glu Gly Gly Phe Asp Tyr".

37. (Original) A human monoclonal antibody that specifically binds to Tumor Necrosis Factor-α and comprises VH3-53 heavy chain gene, or conservative variant thereof.

38. (Original) The human monoclonal antibody of Claim 37, comprising an L2VK3 light chain gene.

39. (Cancelled)

40. (Currently amended) The human monoclonal antibody of Claim ~~39~~ 18, wherein said antibody comprises a heavy chain complementarity determining region 2 (CDR2) corresponding to canonical class 1.

41. (Original) The human monoclonal antibody of Claim 40, wherein said antibody comprises a light chain complementarity determining region 1 (CDR1) corresponding to canonical class 2.

42. (Original) The human monoclonal antibody of Claim 41, wherein said antibody comprises a light chain complementarity determining region 2 (CDR2) corresponding to canonical class 1.

43. (Original) The human monoclonal antibody of Claim 42, wherein said antibody comprises a light chain complementarity determining region 3 (CDR3) corresponding to canonical class 3.

44. (Withdrawn) A method for assaying the level of tumor necrosis factor alpha (TNFα) in a patient sample, comprising contacting an anti-TNFα antibody of Claim 1 or Claim 23 with a biological sample from a patient, and detecting the level of binding between said antibody and TNFα in said sample.

45. (Withdrawn) The method according to Claim 44 wherein the biological sample is blood.

46. (Original) A composition, comprising an antibody of Claim 1 or Claim 23, or functional fragment thereof, and a pharmaceutically acceptable carrier.

47. (Withdrawn) A method of effectively treating an animal suffering from a neoplastic disease, comprising:

selecting an animal in need of treatment for a neoplastic disease; and

administering to said animal a therapeutically effective dose of a fully human monoclonal antibody of Claim 1 or Claim 23 that specifically binds to tumor necrosis factor alpha (TNFα).

48. (Withdrawn) The method of claim 47, wherein said neoplastic disease is selected from the group consisting of: breast cancer, ovarian cancer, bladder cancer, lung cancer, glioblastoma, stomach cancer, endometrial cancer, kidney cancer, colon cancer, pancreatic cancer, and prostrate cancer.

49. (Withdrawn) A method of effectively treating an immuno-mediated inflammatory disease, comprising:

selecting an animal in need of treatment for an inflammatory condition; and

administering to said animal a therapeutically effective dose of a fully human monoclonal antibody of Claim 1 or Claim 23, wherein said antibody specifically binds to tumor necrosis factor alpha (TNFα).

50. (Withdrawn) The method of claim 49, wherein said immuno-mediated inflammatory disease is selected from the group consisting of: rheumatoid arthritis, glomerulonephritis, atherosclerosis, psoriasis, restenosis, autoimmune disease, Crohn's disease, graft-host reactions, septic shock, cachexia, anorexia, ankylosing spondylitis and multiple sclerosis.

51. (Withdrawn) A method of inhibiting tumor necrosis factor alpha (TNFα) induced apoptosis in an animal, comprising:

selecting an animal in need of treatment for TNFα induced apoptosis; and

administering to said animal a therapeutically effective dose of a fully human monoclonal antibody of Claim 1 or Claim 23, wherein said antibody specifically binds to TNFα.

52. -56. (Cancelled)